

Work Order ID 50831

July 23, 2009 7:36:16 AM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Item Name: Replacement Skidtube

Stop



Start Date: 07/30/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 08/07/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *ME*

Date: *09-07-23*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Draw Number | Draw Rev. | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

Filed on w/o 50824

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

) 11 07-2-23

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

120

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

M 9-7-27

130

C5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

27 8 09/14/27

(46)

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

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|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004

A/R□□□ Aluminum Rod

m/11679

BE 09/07/28

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R□□□ Aluminum Rod

m/11679

BE 09/07/28

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Debur

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Debur holes

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

a-7-28

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Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

QC10- Inspect visual per QSI004- ground welds

0.00

2) 8/08/09

Ⓟ

Ⓟ



QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00

2) 8/08/09

Ⓟ

Ⓟ



QC

Memo

0.00

Quality Control

170

Pressure Wash per QSI005 4.3

0.00

BR 09-07-29- Ⓟ



HandFinish

Memo

0.00

Hand Finishing

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|--------------------------------|--------------------------|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

11:30AM

OVEN TEMPERATURE:

320°F

FINISH TIME:

12:00PM

M112148

09-07-29

(X1)

JK

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

BR 09-07-29 D.

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Revision ID: D

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Start Date: 07/30/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 08/07/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R ☐ ☐ ☐ Sikaflex-291 ☐ M111557

Sikaflex expire date: 10/01

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive

A/R ☐ ☐ ☐ Sikaflex-291 ☐ M111557

Sikaflex expire date: 10/01

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: M11103

Bk 09-07-30

| W/O: | | WORK ORDER CHANGES | | | | | |
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| Revision ID: | D | | | | Stop | |
| Item Name: | Replacement Skidtube | | | | | |
| Start Date: | 07/30/2009 | Start Qty: | 1.00 | | Cust Item ID: | |
| Required Date: | 08/07/2009 | Req'd Qty: | 1.00 | | Customer: | |
| Reference: | | | | | | |

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|------------|---------------|-------|------------|-------|-----|-------|--|
| Approvals: | Process Plan: | Date: | Tooling: | Date: | Run | Start | |
| | QC: | Date: | SPC (Y/N): | Date: | | Stop | |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Draw Number | Draw Rev. | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|----------------|--------------|--------------|---------------|---------------|------------------|----------------|
| 210 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| | QC | | | | | | | | |
| Quality Control | Memo Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024 | 0.00 | | | | | | | |
| 220 | Packaging | 0.00 | | | | | | | |
| | Packaging | | | | | | | | |
| Packaging | Memo Identify and pack for shipping as per PPPD205-634-041 Location: _____ PPP Rev: _____ | 0.00 | | | | | | | |
| 230 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| | QC | | | | | | | | |
| Quality Control | Memo | 0.00 | | | | | | | |

2 = SOS/07/30

PPP 50831 9/8/06 DS

U 08.08.05

090810

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50831

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 07/30/2009

Required Date: 08/07/2009

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| D2580-1RevD | | Manufactured | No | | | 110 | Each | 1.0000 | 1.0000 | | | |

205 Skidtube bent detail

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

1

48616

1

140

Each

168.0000

1.0000

DB 50760

mq-7-31

↑ Sam's signature

D2576-3RevG

Manufactured

No



Step (maching detail)

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

168

43504

65

46661

103

140

Each

512.0000

20.0000

BE 9-7-28

D2579RevE

Manufactured

No



Crossbolt Spacer

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

512

43988

4

46434

4

46956

12

47797

438

48272

54

20 BE 9-7-28

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Parent Item: D205-634-041RevD

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Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| D2855RevA | | Manufactured | No | | | 200 | Each | 15.0000 | 1.0000 | | | |

Cap

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | 50513 | |
| ST | 15 | |
| 10360 | 2 | |
| 35663 | 7 | |
| 41340 | 1 | |
| 42343 | 3 | |
| 42806 | 2 | |

1 BR. 07-07-30

AN3-5A

Purchased

No

200

Each

2,562.000 2.0000

Bolt

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | | |
| ST | 2562 | |
| 100188 | 246 | |
| 105057 | 2246 | |
| 15205 | 70 | |

m 111 707

2 BR. 07-07-30

July 23, 2009 7:36:15 AM

Shop Packet Print

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|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---|----------------|--------|
| AN960JD10L  Washer | | Purchased | No | | | 200 | Each | 7,073.000 | 2.0000 |  | | |

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 7157

101291 16

104885 153

105793 236

109632 ✓ 1752

110985 5000

Main Warehouse

ST182 -84

109632 -84

* ALS7-1032-130

Purchased

No

200

Each

3,850.000 50.0000

Insert

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST 3850

108606 52

111529 1798

111779 2000

110511

50

2 BK 09-07-30.

50 BK 09-07-30.

July 23, 2009 7:36:15 AM

Shop Packet Print

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|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| AN3C4A  | | Purchased | No | | | 200 | Each | 152.0000 | 50.0000 | | | |
| BOLT | | | | | | | | | | | | |

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

112082 ✓

152

152

AN960C10L

Purchased

No

200

Each

4,758.000

50.0000

washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

103585

112116 ✓

4758

100

4658

July 23, 2009 7:36:15 AM

Shop Packet Print

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 50831

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 07/30/2009

Required Date: 08/07/2009

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| D3566-13RevC | | Manufactured | No | | | 200 | Each | 32.0000 | 1.0000 | | | |



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP17

-1

46889 ✓

-1

Main Warehouse

ST

33

45717

1

46889

6

47435

8

48166

18

D3566-5RevC

Manufactured No

200

Each

23.0000

1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

23

36113

1

46186

1

47318

1

48167 ✓

20

1 BK 09-07-30

1 BK 09-07-30.

July 23, 2009 7:36:15 AM

Shop Packet Print

Page 5

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 50831

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 07/30/2009

Required Date: 08/07/2009



Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|---|---------------|----------------|--------|
| D3566-1RevC | | Manufactured | No | | | 200 | Each | 24.0000 | 2.0000 | | | |
|  | | | | | | | | |  | | | |
| Gasket | | | | | | | | | | | | |

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | | |
| ST | 24 | |
| 46349 | 1 | |
| 47434 | 2 | |
| 48165 ✓ | 10 | |
| 48557 | 11 | |

2 BK 09-07-30

| | | | | | | | | | | | | |
|---|--|--------------|----|--|--|-----|------|---------|---|--|--|--|
| D3564-11RevD | | Manufactured | No | | | 200 | Each | 21.0000 | 1.0000 | | | |
|  | | | | | | | | |  | | | |
| Wearshoe | | | | | | | | | | | | |

| <u>Warehouse</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|------------------|----------------|-----------------|
| <u>Location</u> | | |
| Main Warehouse | | |
| ST | 21 | |
| 45823 | 1 | |
| 47432 ✓ | 8 | |
| 48553 | 12 | |

1 BK 09-07-30

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Shop Packet Print

Page 6

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50831

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 07/30/2009

Required Date: 08/07/2009

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|---|---------------|----------------|--------|
| D3564-13RevD | | Manufactured | No | | | 200 | Each | 34.0000 | 1.0000 | | | |
|  | | | | | | | | |  | | | |
| Wearshoe | | | | | | | | | | | | |

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP17

13

48554 ✓

13

Main Warehouse

ST

21

45409

3

46495

10

47867

8

D3564-9RevD

Manufactured

No

200

Each

18.0000

1.0000



Wearshoe



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

18

44659

1

45825

1

47316 ✓

4

48556

12

July 23, 2009 7:36:15 AM

Shop Packet Print

Page 7

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 50831

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 07/30/2009

Required Date: 08/07/2009

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|---|---------------|----------------|--------|
| D3564-5RevD | | Manufactured | No | | | 200 | Each | 23.0000 | 1.0000 | | | |
|  | | | | | | | | |  | | | |
| Wearshoe | | | | | | | | | | | | |

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG 2

34806 2

Main Warehouse

FP19 12

48555 ✓ 12

Main Warehouse

ST 9

45824 1

47433 1

48164 ✓ 7

D2594-3RevC

Manufactured No

200

Each

918.0000

16.0000



O-Ring, 205 Skidtube

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST 918

27168 44

29908 ✓ 874

1 BR 09-07-30.

116 BR 09-07-30.

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Shop Packet Print

Page 8

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50831



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 07/30/2009

Required Date: 08/07/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Remaining Qty To Pick | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|--------------------------|---------------|----------------|--------|
| D2594-1RevC | | Manufactured | No | | | 200 | Each | 716.0000 | 16.0000 | | | |



Plug, 205 Skidtube



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

716

42221

16

42807

92

43884 ✓

103

46435

3

47251

502

16 BK 09-07-30

July 23, 2009 7:36:15 AM

Shop Packet Print

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

DART

| | | | |
|------------------|----------------|--|------------------------|
| DESIGN # | DRAWN BY RH | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED # | APPROVED # | DRAWING NO. D2580 | REV. D SHEET 1 OF 3 |
| DATE 07.02.27 | | TITLE 205 SKIDTUBE ASSEMBLY SCALE NTS | |
| A | 96.09.16 | NEW ISSUE | |
| B | 96.12.02 | AS MANUFACTURED | |
| C | 98.08.26 | REDRAWN, INCLUDED DEO 9094/9097 | |
| D | 07.02.27 | CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183 | |

RELEASED
07-06-28 #

| QTY -041 | QTY -045 | Part Number | Description |
|-------------|-------------|---|-------------------|
| X | | D2580-041 | SKIDTUBE ASSEMBLY |
| | X | D2580-045 | SKIDTUBE ASSEMBLY |
| | | | |
| 1 | 1 | D2500-1-190 | EXTRUSION |
| 1 | 1 | D2576-3 | STEP |
| 20 | 24 | D2579 | CROSS BOLT SPACER |
| 16 | 16 | D2594-1 | PLUG |
| 16 | 16 | D2594-3 | O-RING |
| 1 | 1 | D2596 | 205 WEB |
| 1 | 1 | D2855 | AFT CAP |
| 1 | 1 | D3564-5 | WEARSHOE |
| 1 | 1 | D3564-9 | WEARSHOE |
| 1 | 1 | D3564-11 | WEARSHOE |
| 1 | 1 | D3564-13 | WEARSHOE |
| 2 | 2 | D3566-1 | GASKET |
| 1 | 1 | D3566-5 | GASKET |
| 1 | 1 | D3566-13 | GASKET |
| | | | |
| 50 | 50 | ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130 | INSERT |
| 50 | 50 | AN3C4A | BOLT |
| 2 | 2 | AN3-5A | BOLT |
| 50 | 50 | AN960C10L | WASHER |
| 2 | 2 | AN960JD10L | WASHER |

GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

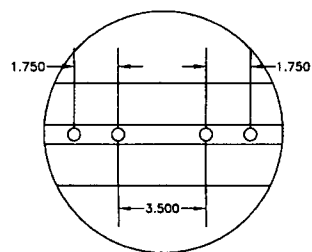
50831

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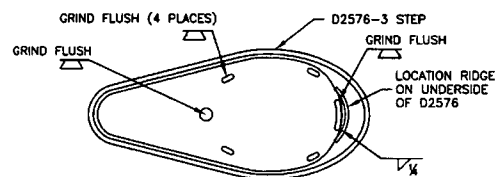
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18805 01m

DETAIL A
SCALE 5:24

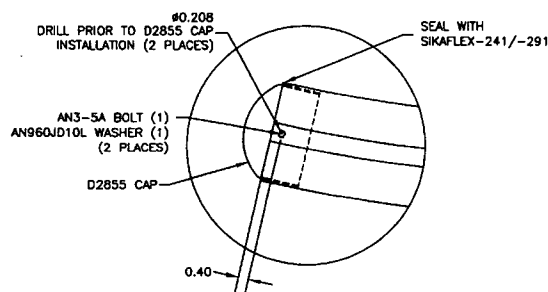


DETAIL B
SCALE 5:24

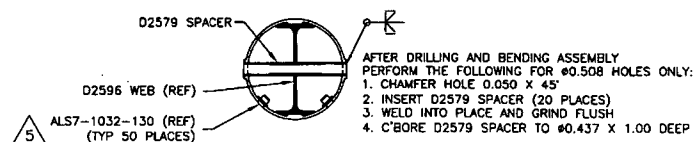


RELEASED
07 de 28

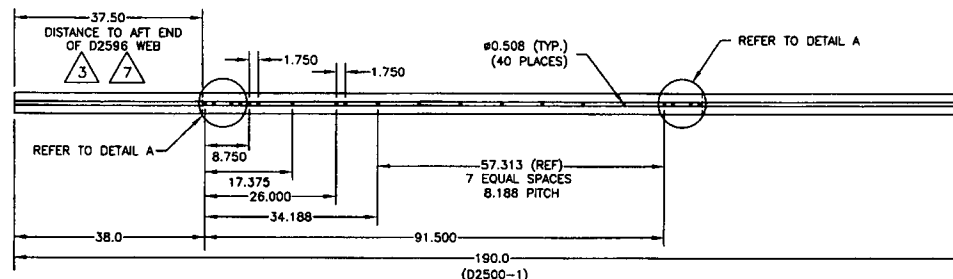
DETAIL C
SCALE 5:24



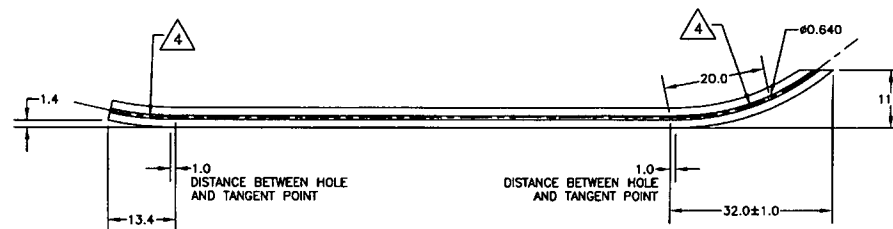
SECTION D-D
SCALE 5:24



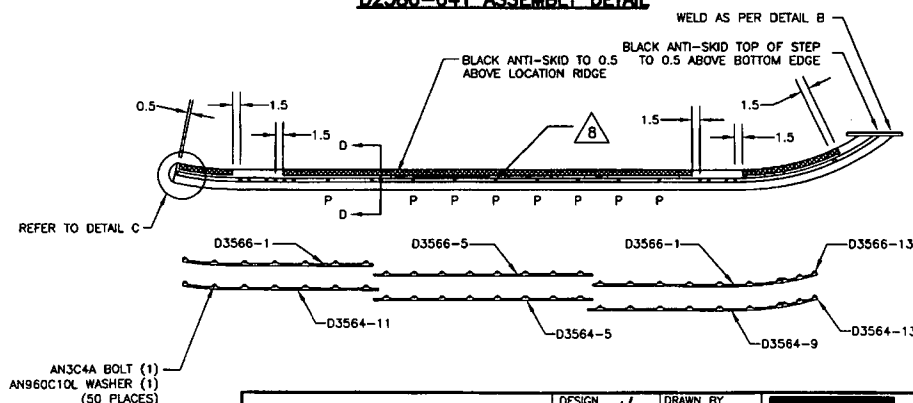
D2580-1 DRILLING DETAIL



D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



D2580-041 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

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| | | | |
|----------|----------|-----------------------|---|
| DESIGN | DRAWN BY | DART | DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA |
| CHECKED | APPROVED | DRAWING NO. | REV. D |
| DATE | | D2580 | SHEET 2 OF 3 |
| 07.02.27 | | TITLE | SCALE |
| | | 205 SKIDTUBE ASSEMBLY | 1:24 |

L24

NO. 202

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Berkeley Elliott
Job number: 48448A
Part number: D805634 041
Description: 205 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[] DC[☒]

TEST REQUIREMENTS AND RESULTS

Visual:
Penetration:

pass[☒] fail[]
pass[☒] fail[]

UNACCEPTABLE

Cracks:
Undercut:
Pin holes:
Overlap (cold lap)
Porosity (surface):
Coloration:

pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]

REFERENCE ONLY

Qualifier P. Dal Date of Test Coupon 09.06.17

Welder Berkeley Elliott Date of Test Coupon 09.06.17

The above named individual is qualified in accordance with AWS D17.1.2001 to weld